CIA/RR CB-62-28 ~~C O N F I D E N T I A L~~ Copy No. 28
29 March 1962

14576

CURRENT SUPPORT BRIEF

THE SOVIET FERTILIZER INDUSTRY: GREAT PLANS, LITTLE PROGRESS

OFFICE OF RESEARCH AND REPORTS

CENTRAL INTELLIGENCE AGENCY

CIA HISTORICAL REVIEW PROGRAM
RELEASE AS SANITIZED
1998

This report represents the immediate views of the originating intelligence components of the Office of Research and Reports. Comments are solicited.

W-A-R-N-I-N-G

This document contains information affecting the national defense of the United States, within the meaning of the espionage laws, Title 18 USC, Sections 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

P.L

~~C O N F I D E N T I A L~~

THE SOVIET FERTILIZER INDUSTRY: GREAT PLANS, LITTLE PROGRESS

The Soviet fertilizer industry, the subject of sharp criticism at the March 1962 Plenum on agriculture, continues to make unsatisfactory progress toward the fulfillment of its long-term goals. Production in the last three years has increased at a rate far short of that needed to meet the objectives of the Seven-Year Plan (1959-65) and there is abundant evidence of shortfalls in the investment program. While some improvement in performance is likely in the next few years production in 1965 will probably be substantially below the original Seven-Year Plan goal of 35 million tons. Despite this, the goal was apparently raised sometime last year.

After Khrushchev had expressed strong dissatisfaction with the 1961 output of fertilizers in his opening speech to the March 1962 Plenum, the Chairman of the State Committee for Chemistry, V.S. Fedorov, confirmed that the 1965 goal had been increased to 37.7 million tons. 1/ He also announced that a goal of 45 million tons had been set for 1966. The increased goal for 1965 had evidently been under consideration at least since the January 1961 Plenum on agricultural problems. At that meeting Khrushchev announced that additional funds were being provided for fertilizers* and in May 1961 a Soviet agricultural specialist said that the goal for 1965 had been increased and that output in 1965 would probably reach at least 40 million tons. 2/ In September 1961 there was an indication that the planned supply of fertilizers to agriculture in 1965 had been increased. 3/

On the other hand, evidence has accumulated during the past few years which suggests that even the original Seven-Year Plan goal was thought to be unrealistically high by some Soviet planners. When Khrushchev released the first details of the Seven-Year Plan in 1958 he did not give a specific goal for fertilizers but plans reported for required basic chemicals pointed to a goal of only about 25 million tons. Subsequently the target of 35 million tons was announced in the Seven-Year Plan directives and it was reported that Gosplan was preparing proposals for additional investments in the chemical industry to provide for increased production of fertilizers. 4/ The original investment figure given by Khrushchev was never publicly raised, however, and he admitted in December 1959 that funds were insufficient to expand production of fertilizers to the extent needed. Plans for production of basic chemicals released in 1959, however, suggested a 1965 figure somewhat higher than 25 million. 5/ In March 1959 an official of the Committee for Chemistry implied a goal of considerably less than 35 million tons for 1965. 6/ Recently, the Deputy Chairman of the Committee on Chemistry implied that production of 25 to 35 million tons was anticipated for 1965 when he said that production would have to be raised by 100 million tons during 1966-80 to bring output in 1980 up to 125-135 million tons. 7/

Annual planning apparently has been based on modest increases during the 1959-61 period, with extremely large increases to be achieved in the final years of the plan. According to an official of the Committee for Chemistry the annual increment in output was to reach 3.68 million tons by the end of the Seven-Year Plan, although growth would average only .855 million tons per year in 1959-61. 8/ Actually, output increased 2.9 million tons during 1959-61 or about

* Investment in facilities for making fertilizers and required intermediates currently accounts for a substantial share--perhaps 20-25 percent--of the total investment in the chemical industry.

.3 million tons over this version of the plan. However, according to Fedorov, output during the period exceeded the control figures for the Seven-Year Plan by 1.7 million tons, indicating the plans for 1959-61 were subsequently reduced to an even more modest level. 9/ In addition, the overfulfillment was achieved chiefly by "intensification" of productive processes, replacement of old equipment, and by better utilization of existing capacity, according to Fedorov. Thus, present overfulfillment of production plans means little in terms of success or failure in meeting the long-term goals.

Future increases of the magnitude planned will depend heavily upon the investment program which thus far has been going poorly. During 1959-61, according to Fedorov, the plan for putting new capacities into operation was fulfilled only 44 percent--a shortfall of 2.7 million tons of capacity. 10/ Reasons for the shortfall are not difficult to find. With chemical industry plans oriented to the introduction of a large number of new products and to the conversion of the raw material base to the use of petrochemical raw materials, the attendant strain upon the planning, research and development, and construction resources has been acute, and investment goals for the industry as a whole have been underfulfilled each year during 1959-61. The fertilizer industry has shared the unhappy lot of other branches of the chemical industry, being plagued with defective equipment, shortages of equipment and tardy receipt of technological designs. An illustration of the serious nature of the defects in equipment is apparent in the admission that a large combine in the Ukraine primarily producing nitrogen fertilizers was required to use 200 workers per day throughout 1960 to repair defective equipment arriving at the combine. 11/ Although a number of fertilizer plants converted to the use of natural gas in 1959-61 (some 30 percent of Soviet ammonia was produced via natural gas in 1961), not all the new processes have enjoyed early success. For example, at the aforementioned Ukrainian nitrogen combine, the percent of conversion of ammonia to useful end-product was reportedly lower in a recently completed shop than in an older shop already operating 10 years. 12/

Historically the Soviets have required 5 to 10 years to complete construction of fertilizer plants. While it is probable that some progress will be made in cutting construction periods, the improvement may be modest; a recent report indicates that only very limited success has been achieved in standardizing designs for Soviet fertilizer plants. 13/ One approach already used to accelerate development of the Soviet fertilizer industry and to reduce construction periods is the purchase of complete production installations from the West. In the last few years the USSR has purchased at least 3 urea plants and 3 ammonia plants in Western countries. In view of the current situation, such purchases will perhaps be accelerated. Fedorov indicated at the recent plenum that machinery from several of the Socialist countries should make a definite contribution to the further development of Soviet fertilizer production. 14/ If this is an implication that imports of such equipment are to exceed previously planned levels, it will scarcely come as a pleasant surprise to the Satellites, particularly in view of the still inadequate production of fertilizers in these countries.

In an assessment of long-range prospects for the Soviet fertilizer industry the degree to which the Soviet political leaders themselves are seriously committed to the goals which have been planned must also be considered. While the future is certainly open to

question, past performance does not speak for a very firm commitment. As an example, during 1959-60 Soviet superphosphate plants operated at only 83-84 percent capacity because of "shortages" of apatite concentrate and sulfuric acid, yet during that period the USSR exported substantial quantities of apatite concentrate. 15/ This situation apparently continues, for, according to Ukrainian Party Chief N.V. Podgorny, the Ukrainian superphosphate plants are scheduled to utilize only 66 percent of their capacity this year. 16/

Production of Mineral Fertilizer in the USSR
1955 - 1966

Million metric tons

Year	Output	Increase Over Previous Year
1955	9.7	--
1956	10.9	1.2
1957	11.8	0.9
1958	12.4	0.6
1959	12.9	0.5
1960	13.9	1.0
1961	15.3	1.4
1962 (Plan)	17.2	1.9
1963	n.a.	
1964	n.a.	6.8 (average)
1965 (Plan)	37.7	
1966 (Plan)	45.0	7.3

Coord:

Sources:

1. Selskaya zhizn, 10 Mar 62, p. 2. U.
2. CIA. CIA/RR CB-61-37, Are Soviets Planning Leap Forward in Fertilizer Production?, 11 Jul 61. C.
3. Gt Brit, BBC, Summary of World Broadcasts, Part I, USSR, 15 Sep 61. U.
4. Pravda, 15 Nov 58, p. 1. U.
5. Planovoye khozyaystvo, no 2, 1959, p. 21; no 9, 1959, p. 28. U.
6. Selskoye khozyaystvo, 15 Mar 59. p. 3. U.
7. Ekonomicheskaya gazeta, 8 Jan 62, p. 10. U.
8. Selskoye khozyaystvo, (see 6, above). U.
9. Selskaya zhizn, (see 1, above) p. 2. U.
10. Stroitelnaya gazeta, 11 Feb 61, p. 3. U.
11. Ekonomicheskaya gazeta, 24 May 61, p. 2. U.
12. Ibid.
13. Stroitelnaya gazeta, 11 Feb 61, p. 3. U.
14. Selskaya zhizn, (see 1, above) p. 2. U.
15. CIA. CIA/RR CB-61-55, Large Exports Contribute to Shortage of Fertilizers in the USSR, 2 Nov 61. C.
16. Pravda, 7 Mar 62, p. 4. U.